

Atty Docket No.: JCLA8479

Serial No.: 10/033,749

**REMARKS****Present Status of Application**

The Office Action mailed February 03, 2003, objected the drawings for not showing every feature of the invention. The Office Action objected the specification for the title not being descriptive and objected claims 16 and 21 for informalities. Claims 1-23 were rejected under 35 USC§112, first paragraph, as containing subject matter which was not described in the specification. Claims 1-23 were rejected under 35 USC§112, second paragraph, for being indefinite. Claims 1-6, 8, 12-16 and 20-23 were rejected under 35 USC§102 (b) as being anticipated by Reed, Jr. et al. (US Patent No. 3,596,228). Claims 9-11 and 17-19 were rejected under 35 USC§103 (a) as being unpatentable over Reed, Jr. et al.. The Office Action further pointed out that claim 7 was objected but would be allowable if rewritten in independent form. The Office Action stated that the listing of references in the specification is not a proper information disclosure.

The drawings have been amended, in response to the points mentioned by the Office Action, while the specification has been amended according to the amendments made to the drawings and for clarification. The title has been amended to be clearly indicative of the present invention. Claims 1, 4-5, 8 and 13-15 have been amended, in response to the points mentioned by the Office Action and providing further descriptions for clarification, while claims 2, 12 and 16-23 have been cancelled. No new matter has been added to the application by the amendments made to the specification, claims and drawings. In light of the amendments and the following discussion, reconsideration and withdrawal of these rejections are respectfully requested.

**Atty Docket No.: JCLA8479****Serial No.: 10/033,749****Discussion for objections**

The drawings were objected under 37 CFR 1.83(a) for failing to show every feature of the invention specified in the claims, including a coaxial transmission structure, a multi-layered microwave circuit, a vertical connector, a matching circuit device, a connector and the fixed end as described in the specification.

In response thereto, applicants have carefully revised the drawing figures and the specification, to ensure that these features have been incorporated and specified in the drawings as suggested by the Office Action. Submitted for the Examiner's approval are the proposed drawings (Figs. 1A-1C and 5A-5B), while Figures 1 and 5 have been renumbered as Figures 1A and 5A, respectively. Supporting grounds of the amendments of the drawings can be found in the paragraphs [0021]-[0024] of the specification and claims. The specification has been amended according to new figure numberings of the proposed drawings.

The Office Action objected the specification for the title not being descriptive and objected claims 16 and 21 for informalities.

The title has been amended, while claims 16-23 has been deleted.

Reconsideration and withdrawal of these objections are respectfully requested.

**Information Disclosure Statement**

The Office Action pointed out that the listing of references in the specification is not a proper information disclosure.

The reference recited in page 2, paragraph [0005] of the specification, "Rugged probe design MIC measurement" has been submitted in a separate paper (enclosed within), in order to

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comply with 37 CFR 1.98(b).

**Discussion for 35 USC§ 112 rejections**

Claims 1-23 were rejected under 35 USC§112, first paragraph, as containing subject matter which was not described in the specification. Claims 1-23 were rejected under 35 USC§112, second paragraph, for being indefinite for failing to particularly point out and distinctly claim the subject matter.

The Office Action considered that the term "soft" in claims 1, 8 and 16 is not well defined and unclear. Claim 1 has been amended to delete the term "soft", while claim 16 has been cancelled. Applicant would like to point out that there is no such term "soft" present in claim 8.

The Office Action considered that the concise meaning of the phrase "a medium" in claim 2 is not clear. Claims 2 and 12 have been cancelled, while the specification has been amended to clarify the meanings of the sentence. It should thus be interpreted that the probe tip is protrusive into the air because the probe tip extends out from the planar transmission structure and is not attached on the multi-layered dielectric substrate.

The Office Action alleged that no angle or range is provided in the specification for "a limited angle". In response thereto, paragraph [0021] of the specification has been amended according to Figures 2 and 4 by reciting "rotating 110 with an angle  $\phi$  and diving and lifting 112 with an angle  $\theta$ ".

Applicant believes that no new matter has been added to the application by the amendments made to the claims. Reconsideration and withdrawal of these rejections are respectfully requested.

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**Discussion for 35 USC 102 and 103 rejections**

*Claims 1-6, 8, 12-16 and 20-23 were rejected under 35 USC§102 (b) as being anticipated by Reed, Jr. et al. (US Patent No. 3,596,228).*

Applicant has amended the independent claims 1 and 8 to more clearly define the structure according to the present invention. As amended, claims 1 and 8 recite respectively:

1. A resilient and rugged probe, to measure an on-wafer signal, the probe comprising:  
a metal probe tip;  
a resilient multi-layered dielectric substrate;  
***a planar transmission structure, coupled to the metal probe tip and attached onto the resilient multi-layered dielectric substrate, wherein the metal probe tip extends out from the planar transmission structure without being attached to the resilient multi-layered dielectric substrate; and***  
a fixed end, coupled to the resilient multi-layered dielectric substrate and the planar transmission structure.

8. A resilient and rugged probe, used to measure a signal of a substrate, comprising:  
a probe tip;  
***a planar transmission structure, coupled to the probe tip; and***  
***a multi-layered dielectric material, coupled to the planar transmission structure, wherein the probe tip extends out from the planar transmission structure without being attached to the multi-layered dielectric material, and wherein the multi-layered dielectric material allows a device to be embedded therein.***

***(Emphasis added)***

Applicants submit that claims 1 and 8 patently define over the prior references for at least the reason that the cited art fails to disclose at least the features emphasized above.

The Office Action alleged that Reed Jr. disclosed substantially the same structure as claimed in the present invention.

Applicant respectfully traverse this interpretation for the following reasons.

Reed Jr. discloses a constant impedance or impedance matched fluid actuated contactor for engaging with chips, having a composite sheet 16 including a flexible dielectric membrane 22 in the middle, a resilient conductive ground plate 24 on the bottom and a plurality of conductive

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copper lines 26 on membrane 22. The conductive line 26 including recesses 34 in its terminal portion 32 is bonded to the dielectric membrane 22 (Col. 4, lines 7-11).

Obviously, Reed Jr. does not disclose the probe tip extending out from the planar transmission structure without being attached to the multi-layered dielectric substrate/material as claimed in claims 1 and 8, even if considering the portion 32/34 as comparable to the probe tip as suggested by the Office Action. Therefore, Reed Jr. fails to disclose all the features as claimed in the present invention. As a result, Applicant submits that independent claims 1 and 8 patently define over the cited reference.

*Claims 9-11 and 17-19 were rejected under 35 USC§103 (a) as being unpatentable over Reed, Jr. et al..*

As discussed supra, the reference Reed, Jr. does not disclose or suggest the above-discussed features as claimed in the independent claims. Reed, Jr.'s contactor structure is not equivalent to the probe structure as claimed in the present invention.

Dependent claims are submitted to be patentably distinguishable over the cited combination of references for at least the same reasons as independent claims 1 and 8, from which these claims respectively depend, as well as for the additional features that these claims recite. The claims are believed allowable and such allowance is respectfully requested.

In view of the above amendment and discussions, reconsideration and withdrawal of the 102 rejection and 103 rejection are respectfully requested.

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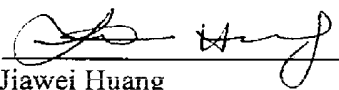
**CONCLUSION**

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,  
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